

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE


Applicants:	Shaun S. Wang	Examiner:	Jennifer L. Liversedge
Appl. No.:	09/923,377	Art Group:	3692
Filing Date:	August 6, 2001	Our File No.:	39172.00.0006
Conf. No.:	8932	Patent No.:	7,315,842
Title:	COMPUTER SYSTEM AND METHOD FOR PRICING FINANCIAL AND INSURANCE RISKS WITH HISTORICALLY-KNOWN OR COMPUTER-GENERATED PROBABILITY DISTRIBUTIONS		

CERTIFICATE OF ELECTRONIC TRANSMISSION

I hereby certify that this paper is being transmitted electronically to the Electronic Business Center at the USPTO at the address and on the date shown below:

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Mail Stop Petition
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450


W. Dennis Drehkoff

1-17-08
Date

PETITION UNDER 1.322(3)(B)

Dear Sir:

Applicant requests the printing of a corrected patent for U.S. Patent No. 7,315,842 issued on January 1, 2008. Applicant submits that the omission of Tables 1–15 in the issued patent document incurred through the fault of the U.S. Patent Office for such a mistake is clearly disclosed in the file history of the above-identified patent.

The following remarks outline the facts that show the omission.

The above-identified application was filed on August 6, 2001, comprising 80 pages of specification, 27 pages of claims, 6 sheets of drawings, and 11 pages of tables. Exhibit A is a copy of the postcard submitted with the application at the time of filing.

On November 20, 2006, an Office Action was mailed requesting information and making a restriction requirement. There was no mention in this Office Action of missing Tables 1–15.

Applicant's attorney assumed Tables 1–15 were present in the application file, since they were mailed with the other patent application documents at the time of filing the application.

On January 22, 2007, Applicant responded to the restriction requirement.

On May 23, 2007, a nonfinal Office Action was mailed acknowledging the election of claims, rejecting certain claims under 35 U.S.C. §§ 112 and 101, and stating that claims 1–21 and 42–61 contain allowable subject matter if rewritten to avoid the §§ 112 and 101 rejections. Further, the drawings were objected to under 37 C.F.R. § 183(a) because they failed to show multiple tables (Tables 1–15) as described in the specification. Corrected drawing sheets were requested, noting that they should be labeled “Replacement Sheet” or “New Sheet.” Further, the Office Action stated that if the drawings are not accepted by the Examiner, Applicant will be notified and informed of any required corrective action in the next Office Action.

In response to the Office Action dated May 23, 2007, Applicant submitted a response dated August 15, 2007, which included Tables 1–15. This response made amendments to the specification, abstract, and claims and submitted Tables 1–15. For reference, the transmittal letter, first page of the response, page 20 showing the amendments to the drawings, and Tables 1–15, with a postcard receipt, are shown in Exhibit B. A portion of the response is being submitted in the Exhibit because the entire response is quite lengthy, containing over 51 pages.

With reference to the amendment to the drawings, it is stated that Tables 1–15 were being submitted as replacement drawings since they were obviously not currently retained in the application, after being submitted with the application at the time of filing. Tables 1–15 were labeled properly, identifying the inventor, the title, the application number, and the status “Replacement Tables.”

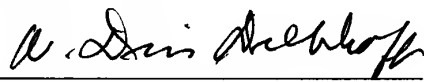
On September 19, 2007, a Notice of Allowance was mailed in response to the amendment mailed on August 15, 2007. In the Notice of Allowability, there is no mention of Tables 1–15, thereby indicating that the replacement tables were approved and accepted into the file history.

Upon reviewing the issued patent, Applicant's attorney noted that Tables 1–15 were missing from the document. Tables 1–15 were in the file at the time of filing the application. Replacement tables were subsequently submitted to the file. Applicant did not receive any indication that the tables were not approved or accepted by the Examiner. Therefore, it appears the omission of the tables from the issued patent document is a result of the activities of the Patent Office. Applicant requests that a corrected patent issue in the place of the current patent without expense to the patentee, or in the alternative, a certificate of correction.

If fees are due for this petition, the Commissioner for Patents is authorized to charge Deposit Acct. No. 22-0295.

Respectfully submitted,

Date: January 17, 2008

By: 
W. Dennis Drehkoff
Registration No. 27,193

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The Patent & Trademark Office acknowledges and has stamped hereon the date of receipt of the item checked below:

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| <input type="checkbox"/> New pat./design/PTO appln. | <input type="checkbox"/> Assignment & Recordal Cover Sheet |
| <input checked="" type="checkbox"/> Transmittal letter (SB/05) | <input type="checkbox"/> CC of priority document |
| <input type="checkbox"/> Fee Transmittal (PTO/SB/17) | <input type="checkbox"/> Application Data Sheet |
| <input checked="" type="checkbox"/> 80 pages spec./abstract | <input type="checkbox"/> Amendment/Response |
| <input checked="" type="checkbox"/> 27 pages of 86 claims | <input type="checkbox"/> Request for Extension |
| <input checked="" type="checkbox"/> 6 sheets of drawings | <input checked="" type="checkbox"/> Fee \$1,069.00 |
| <input checked="" type="checkbox"/> Declaration/Power | <input checked="" type="checkbox"/> Other 11 pages of Tables |

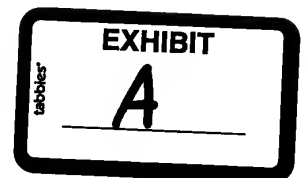
APPLICANT: Shaun Shuxun WANG

SERIAL NO: _____

FILED: _____

TITLE: SYSTEM AND METHOD FOR PRICING
FINANCIAL AND INSURANCE RISKS WITH
HISTORICALLY KNOWN OR COMPUTER...

DOCKET: CU-2319 DATE: 08/06/01



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**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	09/923,377
Filing Date	August 6, 2001
First Named Inventor	Shaun S. Wang
Art Unit	3692
Examiner Name	Jennifer L. Liversedge
Attorney Docket Number	39172.00.0006

ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input checked="" type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input checked="" type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	Replacement Tables
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	Return Receipt Postcard
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	Exhibit 1
<input type="checkbox"/> Reply to Missing Parts/Incomplete Application	<input type="checkbox"/> Landscape Table on CD	
<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	Remarks	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Vedder, Price, Kaufman & Kammholz, P.C.		
Signature	<i>W. Dennis Drehkoff</i>		
Printed name	W. Dennis Drehkoff		
Date	8-15-07	Reg. No.	27,193

CERTIFICATE OF TRANSMISSION/MAILING

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Signature	<i>W. Dennis Drehkoff</i>		
Typed or printed name	W. Dennis Drehkoff	Date	8-15-07

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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EXHIBIT**B**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

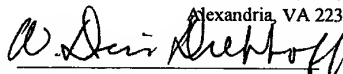
Applicants: Shaun S. Wang Examiner: Jennifer L. Liversedge
Appl. No.: 09/923,377 Art Group: 3692
Filing Date: August 6, 2001 Our File No.: 39172.00.0006
Conf. No.: 8932
Title: **COMPUTER SYSTEM AND METHOD FOR PRICING FINANCIAL AND
INSURANCE RISKS WITH HISTORICALLY-KNOWN OR COMPUTER-
GENERATED PROBABILITY DISTRIBUTIONS**

CERTIFICATE OF MAILING UNDER 37LFR 1.8A

Mail Stop Amendment
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 8-15-07
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RESPONSE TO OFFICE ACTION DATED MAY 23, 2007

Dear Sir:

In response to the above-identified Office Action, Applicant is submitting an amended Specification, Abstract, Claims, and Tables 1-15. This response places the application in better condition for allowance.

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Abstract begin on page 19 of this paper.

Amendments to the Drawings begin on page 20 of this paper and include attached eleven replacement sheets for tables 1-15

Amendments to the Claims are reflected in the listing of claims that begin on page 21 of this paper.

Remarks begin on page 45 of this paper.

Amendments to the Drawings:

Tables 1–15 are being submitted as replacement drawings since they were not in the application file at the Patent Office. Tables 1-15 include the original numbers 108-118. The tables were submitted to the Patent office with the Specification, Claims, and Drawings on August 6, 2001, the filing date of the application. A copy of the return postcard accompanying the application indicating Tables 1–15 were included in the application mailed to the Patent Office is shown as Exhibit 1.

Inventor: Shaun Wang
Title: Computer System and Pricing
Financial and Insurance Risks ...
Application No. 09/923,377
Replacement Tables

Table 1.
Unsorted Intel Stock Price Distribution

Column 1A	Column 1B	Column 1C	Column 1D step 203	Column 1E step 203
Monthly Index	Monthly Return	Current Price (\$)	Prospective Future Stock Price Outcome	Respective Probability
Jun-00	0.03084	133.69	137.811	0.04167
May-00	0.07014	133.69	143.065	0.04167
Apr-00	-0.08148	133.69	122.795	0.04167
Mar-00	0.13985	133.69	152.385	0.04167
Feb-00	0.14109	133.69	152.550	0.04167
Jan-00	0.23234	133.69	164.750	0.04167
Dec-99	0.07862	133.69	144.199	0.04167
Nov-99	0.00412	133.69	134.239	0.04167
Oct-99	0.01417	133.69	135.583	0.04167
Sep-99	-0.10187	133.69	120.069	0.04167
Aug-99	0.14396	133.69	152.933	0.04167
Jul-99	0.14863	133.69	153.558	0.04167
Jun-99	0.25743	133.69	168.103	0.04167
May-99	-0.18136	133.69	109.442	0.04167
Apr-99	-0.03235	133.69	129.364	0.04167
Mar-99	0.12458	133.69	150.342	0.04167
Feb-99	-0.15784	133.69	112.586	0.04167
Jan-99	0.13549	133.69	151.801	0.04167
Dec-98	0.03097	133.69	137.829	0.04167
Nov-98	0.28941	133.69	172.379	0.04167
Oct-98	0.06891	133.69	142.901	0.04167
Sep-98	0.09787	133.69	146.772	0.04167
Aug-98	-0.10390	133.69	119.798	0.04167
Jul-98	0.15784	133.69	154.790	0.04167
Total				1.00000

Inventor: Shaun Wang
Title: Computer System and Pricing
Financial and Insurance Risks ...
Application No. 09/923,377
Replacement Tables

Table 2.
Sorted Intel Stock Price Distribution

Column 2A	Column 2B	Column 2C	Column 2D
Monthly Index	step 204 Prospective Future Stock Price Outcome (\$)	step 204 Respective Probability	step 205 Cumulative Probability
	x	f(x)	F(x)
May-99	109.44	0.04167	0.04167
Feb-99	112.59	0.04167	0.08333
Aug-98	119.80	0.04167	0.12500
Sep-99	120.07	0.04167	0.16667
Apr-00	122.80	0.04167	0.20833
Apr-99	129.36	0.04167	0.25000
Nov-99	134.24	0.04167	0.29167
Oct-99	135.58	0.04167	0.33333
Jun-00	137.81	0.04167	0.37500
Dec-98	137.83	0.04167	0.41667
Oct-98	142.90	0.04167	0.45833
May-00	143.06	0.04167	0.50000
Dec-99	144.20	0.04167	0.54167
Sep-98	146.77	0.04167	0.58333
Mar-99	150.34	0.04167	0.62500
Jan-99	151.80	0.04167	0.66667
Mar-00	152.38	0.04167	0.70833
Feb-00	152.55	0.04167	0.75000
Aug-99	152.93	0.04167	0.79167
Jul-99	153.56	0.04167	0.83333
Jul-98	154.79	0.04167	0.87500
Jan-00	164.75	0.04167	0.91667
Jun-99	168.10	0.04167	0.95833
Nov-98	172.38	0.04167	1.00000
Total		1.00000	

Inventor: Shaun Wang
Title: Computer System and Pricing
Financial and Insurance Risks ...
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Replacement Tables

Table 3.
Kernel, or Core Process, of the Wang Transform ($\Lambda=0.4525$)

Column 2B step 102	Column 2D step 102	Column 3A step 103	Column 3B step 104	Column 3C step 105
Prospective Future Stock Price Outcome (\$)	Cumulative Probability...	... After Applying Normal Inversion	... After Shifting By Adding Lambda	... After Applying Normal Distribution
x	F(x)			
109.44	0.04167	-1.7317	-1.2791	0.10043
112.59	0.08333	-1.3830	-0.9305	0.17607
119.80	0.12500	-1.1503	-0.6978	0.24265
120.07	0.16667	-0.9674	-0.5149	0.30332
122.80	0.20833	-0.8122	-0.3597	0.35954
129.36	0.25000	-0.6745	-0.2220	0.41217
134.24	0.29167	-0.5485	-0.0960	0.46176
135.58	0.33333	-0.4307	0.0218	0.50870
137.81	0.37500	-0.3186	0.1339	0.55326
137.83	0.41667	-0.2104	0.2421	0.59565
142.90	0.45833	-0.1046	0.3479	0.63604
143.06	0.50000	0.0000	0.4525	0.67456
144.20	0.54167	0.1046	0.5572	0.71129
146.77	0.58333	0.2104	0.6630	0.74632
150.34	0.62500	0.3186	0.7712	0.77970
151.80	0.66667	0.4307	0.8833	0.81145
152.38	0.70833	0.5485	1.0011	0.84160
152.55	0.75000	0.6745	1.1270	0.87013
152.93	0.79167	0.8122	1.2648	0.89702
153.56	0.83333	0.9674	1.4200	0.92219
154.79	0.87500	1.1503	1.6029	0.94552
164.75	0.91667	1.3830	1.8355	0.96679
168.10	0.95833	1.7317	2.1842	0.98553
172.38	1.00000	500000.0000	500000.4525	1.00000

Inventor: Shaun Wang
Title: Computer System and Pricing
Financial and Insurance Risks ...
Application No. 09/923,377
Replacement Tables

Table 4.
Wang Price of the Future Intel Stock to One Month ($\lambda=0.4525$)

Column 3B	Column 3C	Column 4A	Column 4B
	step 207	step 208	step 209
Prospective Future Stock-Price Outcome	After Wang Transform	After Decumulation	After Multiplication To Each Outcome
	Transformed Probability	Distorted Probability	Weighted Value
x	$F^*(x)$	$f^*(x)$	$f^*(x) \cdot x$
109.44	0.10042	0.10042	10.990
112.59	0.17606	0.07564	8.516
119.80	0.24264	0.06658	7.976
120.07	0.30330	0.06067	7.284
122.80	0.15953	0.05622	6.904
129.36	0.41216	0.05263	6.809
134.24	0.46175	0.04959	6.657
135.58	0.50869	0.04693	6.363
137.81	0.55324	0.04456	6.141
137.83	0.59564	0.04239	5.843
142.90	0.63603	0.04039	5.772
143.06	0.67455	0.03852	5.510
144.20	0.71128	0.03674	5.297
146.77	0.74631	0.03503	5.141
150.34	0.77969	0.03338	5.018
151.80	0.81144	0.03176	4.821
152.38	0.84159	0.03015	4.594
152.55	0.87013	0.02853	4.353
152.93	0.89701	0.02689	4.112
153.56	0.92218	0.02517	3.865
154.79	0.94552	0.02333	3.611
164.75	0.96678	0.02127	3.504
168.10	0.98552	0.01874	3.150
172.38	1.00000	0.01448	2.495
Total		1.0000	\$ 134.73
			step 210
			\$ 133.94
			step 211

Inventor: Shaun Wang
 Title: Computer System and Pricing
 Financial and Insurance Risks ...
 Application No. 09/923,377
 Replacement Tables

Table 5.
 Wang Price of a European Call Option on Intel Stock with a Strike Price of 140 (Lambda=0.4685)

Column 2B	Column 2D	Column 5A step 307	Column 5B step 308	Column 5C step 309	Column 5D step 315	Column 5E step 316
Prospective Future Stock Price Outcome (\$)	Cumulative Probability	After Wang Transform	After Decumulation, Distorted Probability Weight	Weighted Value For Underlying (\$)	Contingent Payoff For Option (\$)	Weighted Value For Option (\$)
x	F(x)	F*(x)	F*(x)	x * F*(x)	-max(x-140,0)	F*(x) * V(x)
109.44	0.0417	0.1033	0.1033	11.302	0.00	0.000
112.59	0.0833	0.1802	0.0770	8.665	0.00	0.000
119.80	0.1250	0.2477	0.0674	8.079	0.00	0.000
120.07	0.1667	0.3089	0.0613	7.354	0.00	0.000
122.80	0.2083	0.3655	0.0566	6.952	0.00	0.000
129.36	0.2500	0.4184	0.0529	6.839	0.00	0.000
134.24	0.2917	0.4681	0.0497	6.673	0.00	0.000
135.58	0.3333	0.5151	0.0470	6.366	0.00	0.000
137.81	0.3750	0.5596	0.0445	6.132	0.00	0.000
137.83	0.4167	0.6018	0.0423	5.825	0.00	0.000
142.90	0.4583	0.6420	0.0402	5.744	2.90	0.117
143.06	0.5000	0.6803	0.0383	5.474	3.06	0.117
144.20	0.5417	0.7167	0.0364	5.254	4.20	0.153
146.77	0.5833	0.7514	0.0347	5.091	6.77	0.235
150.34	0.6250	0.7844	0.0330	4.960	10.34	0.341
151.80	0.6667	0.8157	0.0313	4.757	11.80	0.370
152.38	0.7083	0.8454	0.0297	4.525	12.38	0.368
152.55	0.7500	0.8735	0.0281	4.279	12.55	0.352
152.93	0.7917	0.8999	0.0264	4.034	12.93	0.341
153.56	0.8333	0.9245	0.0246	3.783	13.56	0.334
154.79	0.8750	0.9473	0.0228	3.525	14.79	0.337
164.75	0.9167	0.9680	0.0207	3.409	24.75	0.512
168.10	0.9583	0.9861	0.0182	3.051	28.10	0.510
172.38	1.0000	1.0000	0.0139	2.396	32.38	0.450
Total			1.0000	\$ 134.47		\$ 4.54
				step 310		step 317
				\$ 133.69		\$ 4.51
				step 311		step 318

Inventor: Shaun Wang
 Title: Computer System and Pricing
 Financial and Insurance Risks ...
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 Replacement Tables

Table 6.
 Wang Price for the Underlying (Lambda=0.0854)

Column 6A	Column 6B	Column 6C	Column 6D	Column 6E	Column 6F
step 304	step 304	step 305	step 307	step 308	step 309
Sorted	Assigned	Cumulative	After Wang	Distorted	Weighted
Outcome (\$)	Probability	Probability	Transform	Probability	Payoff (\$)
x	$f(x)$	$F(x)$	$F^*(x)$	$f^*(x)$	$f^*(x) \cdot x$
\$ (123.00)	0.1	0.1	0.1158	0.1158	\$ (14.25)
\$ (21.00)	0.1	0.2	0.2248	0.1089	\$ (2.29)
\$ (9.00)	0.1	0.3	0.3303	0.1056	\$ (0.95)
\$ 7.00	0.1	0.4	0.4333	0.1030	\$ 0.72
\$ 20.00	0.1	0.5	0.5340	0.1007	\$ 2.01
\$ 20.00	0.1	0.6	0.6326	0.0986	\$ 1.97
\$ 28.00	0.1	0.7	0.7290	0.0964	\$ 2.70
\$ 36.00	0.1	0.8	0.8230	0.0940	\$ 3.39
\$ 50.00	0.1	0.9	0.9142	0.0911	\$ 4.56
\$ 57.00	0.1	1.0	1.0000	0.0858	\$ 4.89
Total	1.0000			1.0000	\$ 2.76
					step 311
					\$ 2.58
					step 312

Table 7.
 Wang Price for the Put Option with a Strike Price of 0.00 (Lambda=0.10)

Column 6A	Column 6C	Column 7A	Column 7B	Column 7C	Column 7D	Column 7E
		step 307	step 308	step 309	step 315	step 316
Sorted	Cumulative	Wang	Distorted	Weighted	Contingent	Weighted
Outcome (\$)	Probability	Transform	Probability	Value (\$)	Payoff (\$)	Payoff (\$)
x	$F(x)$	$F^*(x)$	$f^*(x)$	$x \cdot f^*(x)$	$-\max(-x, 0)$	$f^*(x) \cdot V(x)$
\$ (123.00)	0.1000	0.1187	0.1187	\$ (14.599)	\$ 123.00	\$ 14.60
\$ (21.00)	0.2000	0.2292	0.1105	\$ (2.320)	\$ 21.00	\$ 2.32
\$ (9.00)	0.3000	0.3356	0.1065	\$ (0.958)	\$ 9.00	\$ 0.96
\$ 7.00	0.4000	0.4391	0.1034	\$ 0.724	\$ -	\$ -
\$ 20.00	0.5000	0.5398	0.1008	\$ 2.015	\$ -	\$ -
\$ 20.00	0.6000	0.6381	0.0983	\$ 1.965	\$ -	\$ -
\$ 28.00	0.7000	0.7338	0.0957	\$ 2.681	\$ -	\$ -
\$ 36.00	0.8000	0.8268	0.0930	\$ 3.348	\$ -	\$ -
\$ 50.00	0.9000	0.9164	0.0896	\$ 4.482	\$ -	\$ -
\$ 57.00	1.0000	1.0000	0.0836	\$ 4.763	\$ -	\$ -
Total			1.0000	\$ 2.10		\$ 17.88
				step 310		step 317
				\$ 1.96		\$ 16.71
				step 311		step 318

Inventor: Shaun Wang
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Table 8.
 Rating Migration for a BBB-rated Bond over 1 Year

Column 8A	Column 8B	Column 8C	Column 8D	Column 8E
			step 403	step 403
Year-end	Coupon	Forward	Total	Estimated
Rating	Rate	Value	Value (\$)	Probability
AAA	6%	103.37	109.37	0.020%
AA	6%	103.1	109.19	0.330%
A	6%	102.66	108.66	5.950%
BBB	6%	101.55	107.55	86.930%
BB	6%	96.02	102.02	5.300%
B	6%	92.1	98.10	1.170%
CCC	6%	77.64	83.64	0.120%
Default	0%	51.13	51.13	0.180%
Total				100.000%

Table 9. Wang Price of the BBB-bond ($\Lambda=0.698$)

Column 9A	Column 9B	Column 9C	Column 9D	Column 9E	Column 9F	Column 9G
step 404	step 404	step 405	step 407	step 408	step 409	step 410
Total Value	Estimated	Cumulative	After Wang	Distorted	Apply	Weighted
In 1 Year	Probability	Probability	Transform	Probability	Payoff (\$)	Value (\$)
x	f(x)	F(x)	F*(x)	f*(x)	-x	v(x) * f*(x)
51.13	0.00180	0.0018	0.0134	0.01344	51.130	0.687
83.64	0.00120	0.0030	0.0202	0.00675	83.640	0.565
98.10	0.01170	0.0147	0.0694	0.04923	98.100	4.830
102.02	0.05300	0.0677	0.2133	0.14384	102.020	14.674
107.55	0.86930	0.9370	0.9871	0.77380	107.550	83.222
108.66	0.05950	0.9965	0.9997	0.01259	108.660	1.369
109.19	0.00330	0.9998	1.0000	0.00033	109.190	0.036
109.37	0.00020	1.0000	1.0000	0.00001	109.370	0.001
Total	1.00000			1.00000		\$ 105.38
						step 411
						\$ 100.37
						step 412

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Table 10.
 Estimation of True Market Price of Risk ($\lambda = 0.788$).

Column 9A	Column 9C	Column 10A	Column 10B	Column 10C	Column 10D
	step 405	step 407	step 408	step 409	step 410
Total Value	Cumulative	After Wang	Distorted	Contingent	Weighted
In 1 Year (\$)	Probability	Transform	Probability	Payoff (\$)	Value (\$)
x	$F(x)$	$F^*(x)$	$F^*(x)$	$-x$	$v(x) \cdot F^*(x)$
51.13	0.00180	0.0169	0.01687	51.130	0.862
83.64	0.00300	0.0250	0.00815	83.640	0.681
98.10	0.01470	0.0823	0.05724	98.100	5.615
102.02	0.06770	0.2404	0.15811	102.020	16.130
107.55	0.93700	0.9898	0.74942	107.550	80.600
108.66	0.99650	0.9998	0.00998	108.660	1.084
109.19	0.99980	1.0000	0.00024	109.190	0.026
109.37	1.00000	1.0000	0.00001	109.370	0.001
Total			1.00000		\$ 105.00
					step 411
					\$ 100.00
					step 412

Table 11.
 Estimated Probability Distribution for Earthquake Payoff

Column 11A	Column 11B	Column 11C
	step 503	step 503
Richter	Payout	Estimated
Scale	Amount (\$)	Probability
	x	f(x)
0-5.9	\$ -	0.80000
6.0	\$ 100.00	0.02000
6.1	\$ 110.52	0.01800
6.2	\$ 122.14	0.01620
6.3	\$ 134.99	0.01458
6.4	\$ 149.18	0.01312
6.5	\$ 164.87	0.01181
6.6	\$ 182.21	0.01063
6.7	\$ 201.38	0.00957
6.8	\$ 222.55	0.00861
6.9	\$ 245.96	0.00775
7+	\$ 271.83	0.06974
Total		1.00000

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Table 12.
 Wang Price for the Earthquake Insurance ($\lambda=0.3$)

Column 12A	Column 12B	Column 12C	Column 12D	Column 12E	Column 12F
step 504	step 504	step 505	step 507	step 508	step 509
Payout	Estimated	Cumulative	After Wang	Distorted	Weighted
Amount (\$)	Probability	Probability	Transform	Probability	Payoff (\$)
x	$f(x)$	$F(x)$	$F^*(x)$	$f^*(x)$	$x \cdot f^*(x)$
\$ -	0.80000	0.80000	0.7060	0.7060	\$ -
\$ 100.00	0.02000	0.82000	0.7308	0.0249	\$ 2.49
\$ 110.52	0.01800	0.83800	0.7537	0.0229	\$ 2.53
\$ 122.14	0.01620	0.85420	0.7748	0.0210	\$ 2.57
\$ 134.99	0.01458	0.86878	0.7941	0.0193	\$ 2.61
\$ 149.18	0.01312	0.88190	0.8118	0.0177	\$ 2.64
\$ 164.87	0.01181	0.89371	0.8281	0.0163	\$ 2.68
\$ 182.21	0.01063	0.90434	0.8430	0.0149	\$ 2.72
\$ 201.38	0.00957	0.91391	0.8566	0.0137	\$ 2.75
\$ 222.55	0.00861	0.92252	0.8691	0.0125	\$ 2.78
\$ 245.96	0.00775	0.93026	0.8806	0.0114	\$ 2.81
\$ 271.83	0.06974	1.00000	1.0000	0.1194	\$ 32.47
Total	1.00000			1.00000	\$ 59.05
					step 511
					\$ 55.18
					step 512

Table 13.
 Wang Price of the Contingent Payoff on the Earthquake Insurance

Column 12A	Column 12E	Column 13A	Column 13B
step 504	step 508	step 515	step 516
Payout	Distorted	Contingent	Weighted
Amount (\$)	Probability	Payoff (\$)	Payoff (\$)
x	$f^*(x)$	$\max(x-200, 0)$	$V(x) \cdot f^*(x)$
\$ -	0.7060	\$ -	\$ -
\$ 100.00	0.0249	\$ -	\$ -
\$ 110.52	0.0229	\$ -	\$ -
\$ 122.14	0.0210	\$ -	\$ -
\$ 134.99	0.0193	\$ -	\$ -
\$ 149.18	0.0177	\$ -	\$ -
\$ 164.87	0.0163	\$ -	\$ -
\$ 182.21	0.0149	\$ -	\$ -
\$ 201.38	0.0137	\$ 1.38	\$ 0.02
\$ 222.55	0.0125	\$ 22.55	\$ 0.28
\$ 245.96	0.0114	\$ 45.96	\$ 0.53
\$ 271.83	0.1194	\$ 71.83	\$ 8.58
Total	1.00000		\$ 9.41
			step 517
			\$ 8.79
			step 518

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Table 14.
A Variation of Table 12, Using Exceedence Probabilities

Column 12A	Column 12B	New Column 12C	New Column 12D	Column 12E	Column 12F
step 504	step 504	step 505_new	step 507_new	step 508_new	step 509
Payout	Estimated	Exceedence	After Wang	Distorted	Weighted
Amount (\$)	Probability	Probability	Transform	Probability	Payoff (\$)
x	$f(x)$	$G(x)$	$G^*(x)$	$f^*(x)$	$x f^*(x)$
\$ -	0.80000	0.20000	0.2940	0.7060	\$ -
\$ 100.00	0.02000	0.18000	0.2692	0.0249	\$ 2.49
\$ 110.52	0.01800	0.16200	0.2463	0.0229	\$ 2.53
\$ 122.14	0.01620	0.14580	0.2252	0.0210	\$ 2.57
\$ 134.99	0.01458	0.13122	0.2059	0.0193	\$ 2.61
\$ 149.18	0.01312	0.11810	0.1882	0.0177	\$ 2.64
\$ 164.87	0.01181	0.10629	0.1719	0.0163	\$ 2.68
\$ 182.21	0.01063	0.09566	0.1570	0.0149	\$ 2.72
\$ 201.38	0.00957	0.08609	0.1434	0.0137	\$ 2.75
\$ 222.55	0.00861	0.07748	0.1309	0.0125	\$ 2.78
\$ 245.96	0.00775	0.06974	0.1194	0.0114	\$ 2.81
\$ 271.83	0.06974	0.00000	0.0000	0.1194	\$ 32.47
Total	1.00000			1.00000	\$ 59.05
					step 511
					\$ 55.18
					step 512

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Table 15.
 An Insurance Policy Covering the Total Loss of a Satellite Launch ($\Lambda = -0.2$, Degrees of Freedom = 11)

Column 15A	Column 15B	Column 15C	Column 15D	Column 15E	Column 15F
			Steps 601-606		
Loss .	Estimated	Cumulative	After Two-Factor	Distorted	Weighted
Amount	Probability	Probability	Wang Transform	Probability	Value
x	f(x)	F(x)	F*(x)	f*(x)	x f*(x)
\$ -	0.96000	0.96000	0.9254	0.9254	\$ -
\$ 200.00 mil	0.04000	1.00000	1.0000	0.0746	\$ 14.93 mil
Total	1.00000			1.00000	\$ 14.93 mil
					Price

Applicant: Shaun S. Wang

Application No.: 09/923,377

Title: COMPUTER SYSTEM AND METHOD FOR PRICING FINANCIAL AND INSURANCE RISKS WITH HISTORICALLY KNOWN OR COMPUTER-GENERATED PROBABILITY DISTRIBUTIONS

Filing Date: August 6, 2001

Atty. Docket No.: 39172.00.0006

Mailing Date: August 15, 2007

Enclosed are the following items:

- Amendment and Response to Office Action
- Replacement Drawings and Tables
- Certificate of Mailing
- Exhibit 1

Please affix the PTO mailing stamp showing the date of receipt and return this postcard to the sender shown on reverse.

